

Strategic Planning FY2020- 2022

Collaborative Research Unit (CRU)

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Unit Director

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**COOK COUNTY
HEALTH**

Research at CCH



Mission, Areas of Responsibility



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Importance of Research

- Provides millions \$/year of medications/care through funded research
 - Expensive or investigational medications to treat HIV and cancer
- Informed, inquisitive clinician-investigators improve patient care, lifts morale
- CCH well represented in the medical literature and scientific gatherings
- Influence public health practice and policy through partnerships with public agencies: IDPH, CDPH, CCDPH, CDC, and NIH

CCH Institutional Review Board Mission

- Primary: Protection of human research subjects from harm and assurance of fully informed voluntary participation...
- Secondary: Compliance with laws that govern human subjects protections
- Guiding principles: Autonomy, Beneficence, Justice
- Philosophy: Fulfill these missions with minimal burden to facilitate research that furthers the mission of CCH & improves the care of people we serve

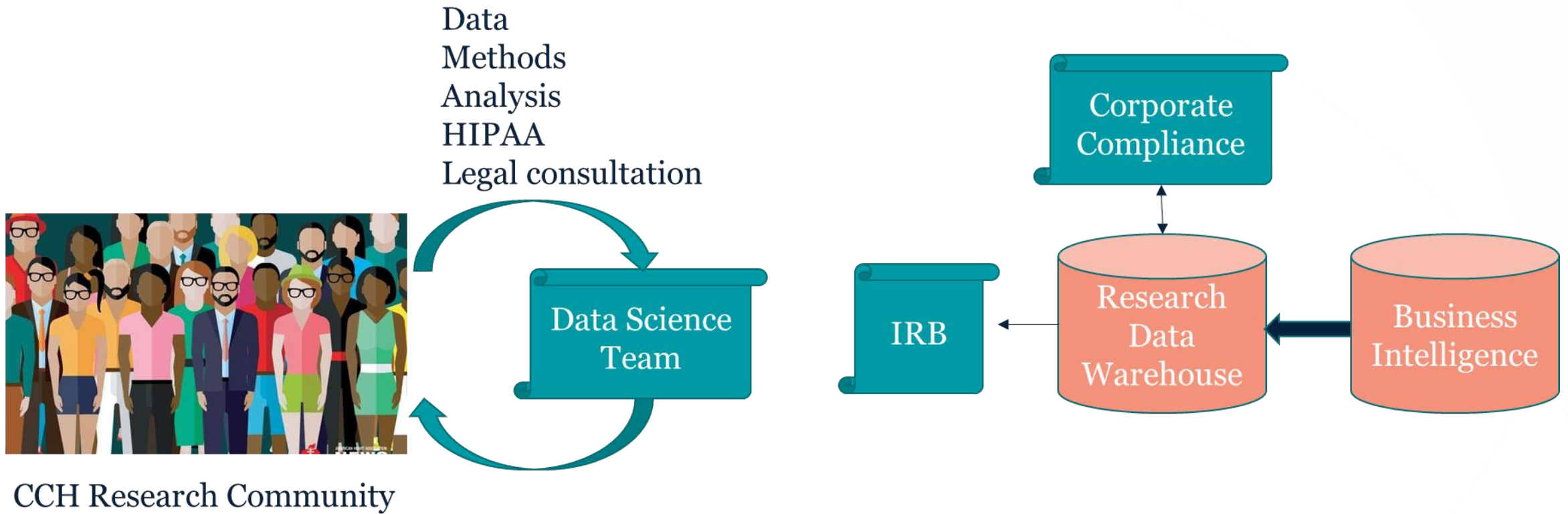
IRB Accomplishments

- Heavy workload:
 - 477 open protocols
 - 188 new protocols reviewed in 2018
 - investigator trainings
- Locally and nationally recognized experts in reviewing research in vulnerable populations (e.g., adolescents and detainees)
- Revised policies and procedures, & trained staff for the revised 2019 Office of Human Research Protections' Common Rule
- Monthly educational programs for investigators: workshops in collaboration with Corporate Compliance, HIS, and CRU

CRU Mission

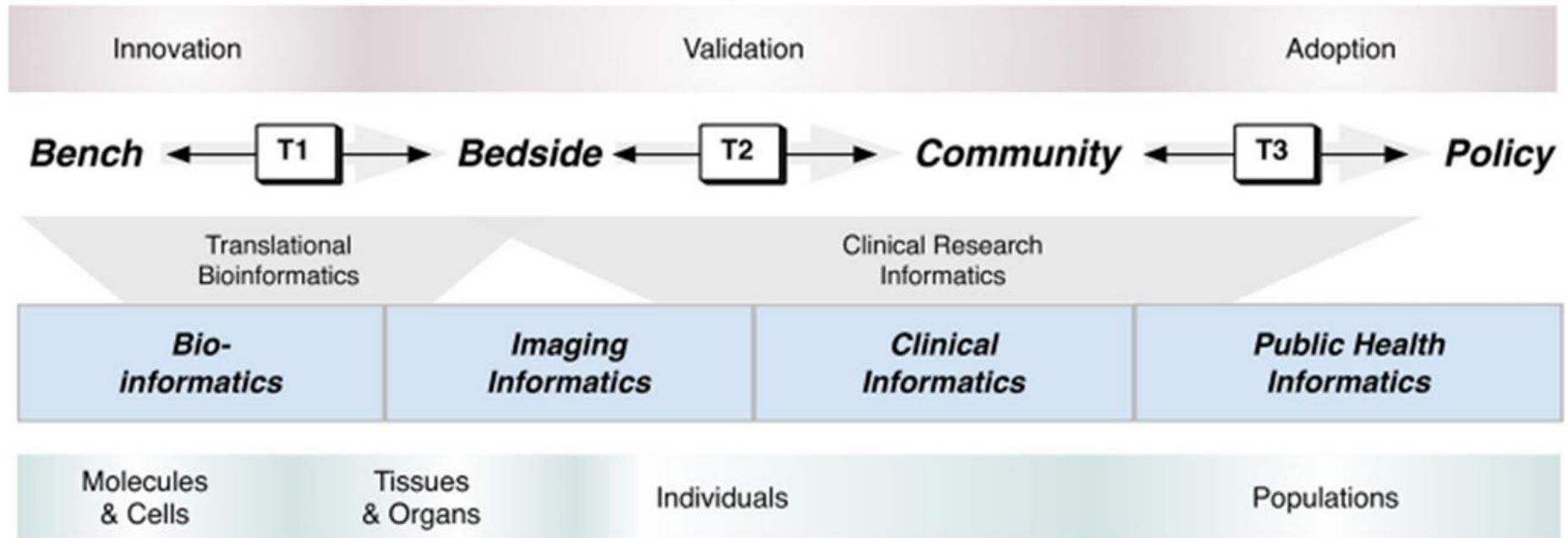
The Collaborative Research Unit promotes ***action research*** on ***highly prevalent problems*** affecting the health of the vulnerable and ***diverse patient population*** of Cook County.

Collaborative Research Unit: CRU



Research Framework

Translational Medicine Continuum



Biomedical Informatics Continuum

Examples of Projects

- Program Evaluation
 - Housing the homeless
 - Medication assisted treatment for opioid addiction
 - Medical-legal partnership
- Analytics to inform large-scale projects
 - Flexible housing pool: homeless
 - Justice and mental health collaborative
 - Social network analyses for opioid prescribing and control of antibiotic-resistant organisms
- Data linkages
 - Real-time messages to focused registries
- Public health interventions
 - Control of multi-drug resistant organisms

Awards: Completed Projects

- **Charles Shepard Nomination:** Outstanding research paper published by CDC scientists
“Effect of screening for partner violence on women's quality of life: a randomized controlled trial”.¹
- **Gage Award for Innovation** in Excellence in America's Essential Hospitals, 2014²
Clinical decision support for Healthy Lungs Initiative Tobacco Program
- **California Healthcare Foundation,** Award for technology supporting complex care management.³
Audio Computer Assisted Self Interviews (ACASI): Provision of social services, oncology

¹ Klevens J, Kee R, Trick W, Garcia D, Angulo FR, Jones R, Sadowski LS. JAMA, 2012.

²Goldberg DN et al. “...a public hospital tobacco cessation program: the cook county health...experience. J Comm Health, 2016.

³ Trick WE, Deamant C, et al. “...ACASI System in a General Medicine Clinic. Applied Clin Inform. 2015.

Impact 2020 Update



Status and Results

- Deliver High Quality Care
- Grow to Serve and Compete
- Foster Fiscal Stewardship
- Invest in Resources
- Leverage Valuable Assets
- Impact Social Determinants
- Advocate for patients



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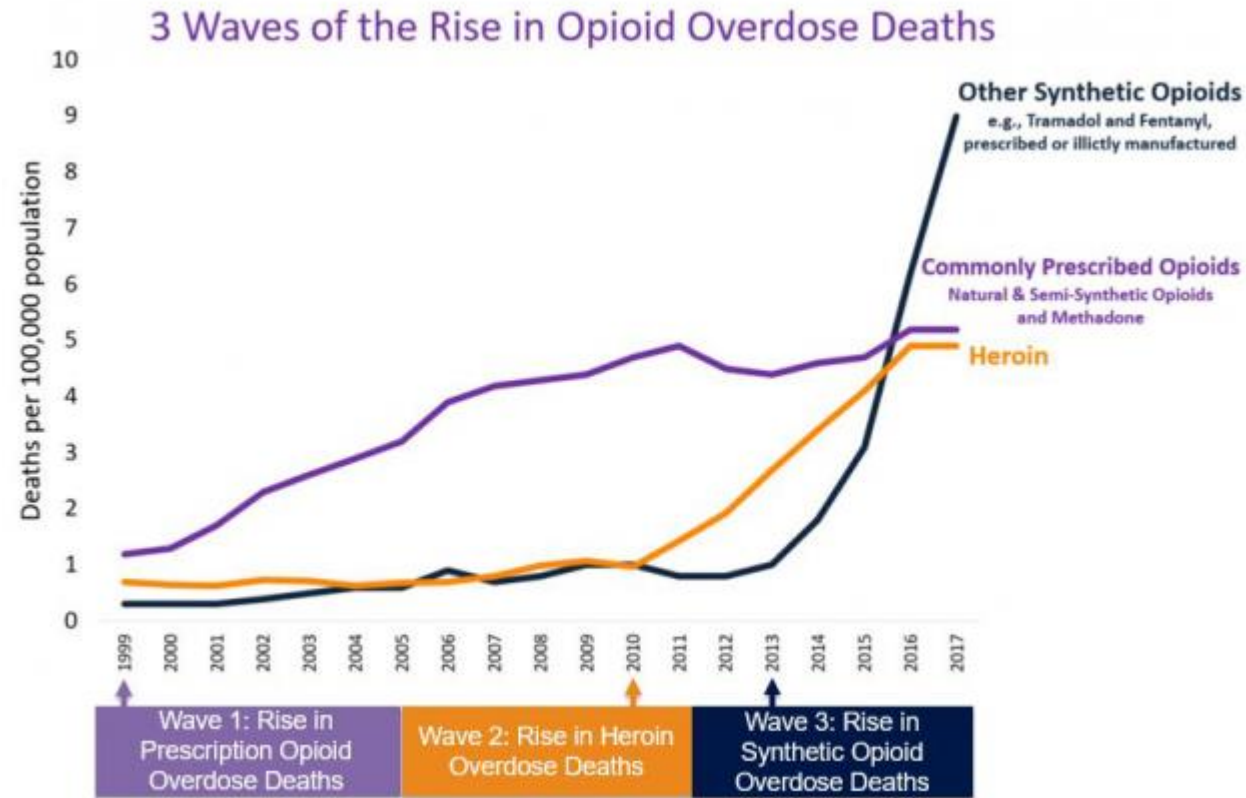
Impact 2020

Progress and Updates

Focus Area	Name	Status
5.3 Exploit relevant sources for monitoring quality, cost, utilization and patient outcomes.	Complete one advanced analysis project by the Collaborative Research Unit (CRU) from the CountyCare claims data.	Complete/ Ongoing
5.6 Produce knowledge (using internal and external sources) about how best to provide care to CCHHS' patients.	Strengthen clinical impact of research to benefit CCHHS patients prioritized informed by clinical leadership or quality council.	Ongoing

Project 1: Opioid Prescribing Social Network, CountyCare

Background: Opioid Overdose Cohorts in the United States



SOURCE: National Vital Statistics System Mortality File.

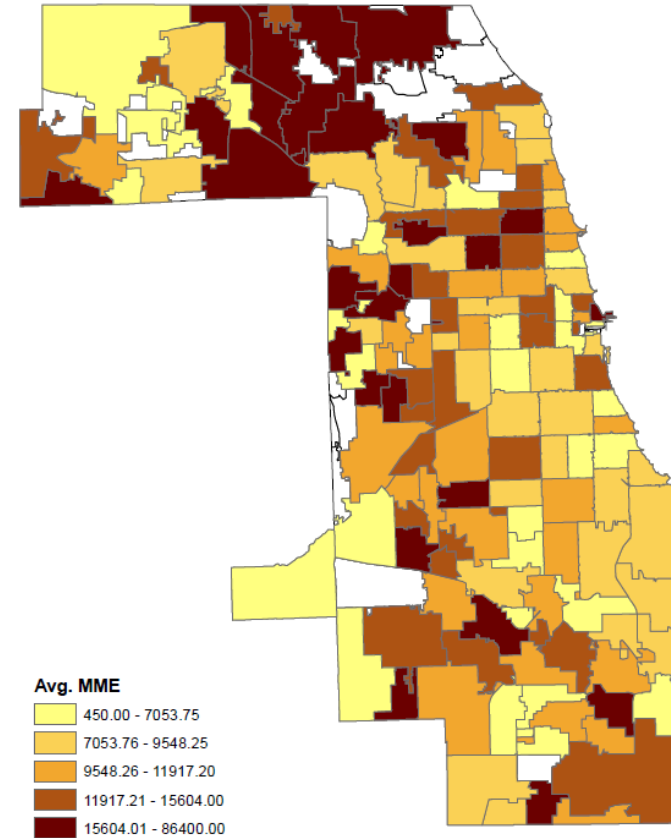
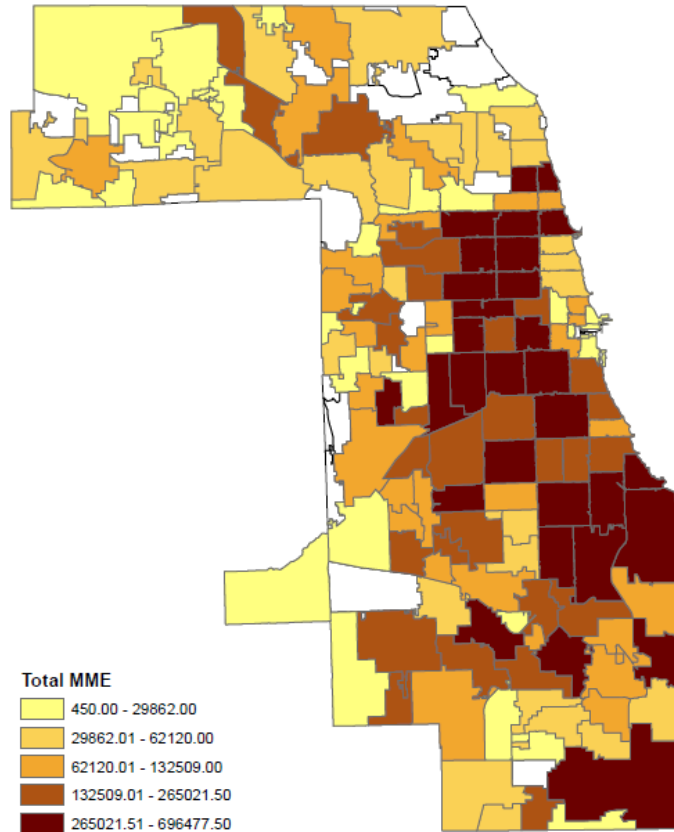


Project 1: Opioid Prescribing Social Network, CountyCare

Opioid Claims for CountyCare Beneficiaries by ZIP Code, 2015-16

Cumulative MME Dispensed In ZIP Code

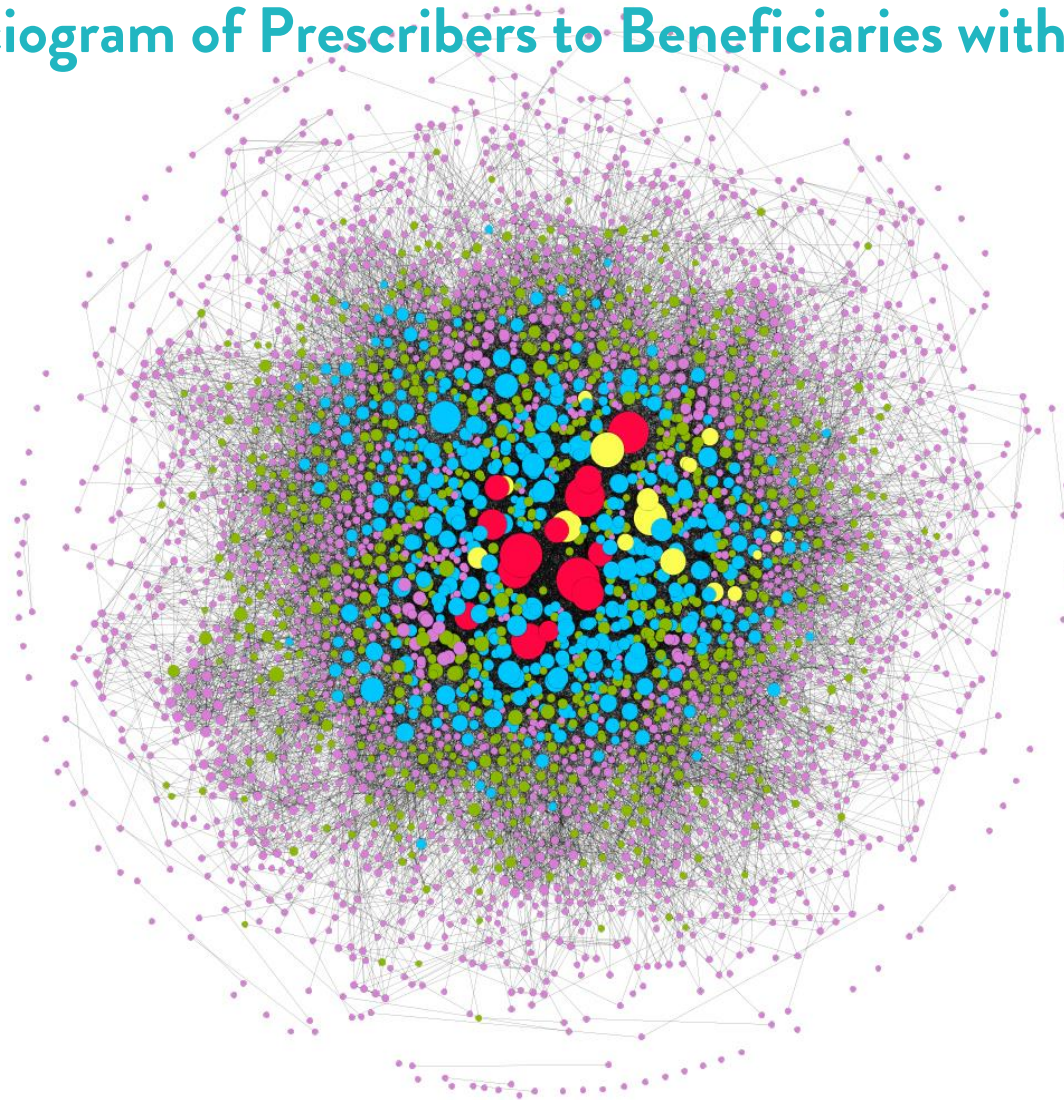
Mean MME Per Beneficiary Dispensed In ZIP Code



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Project 1: Opioid Prescribing Social Network, CountyCare

K-core Unimodal Sociogram of Prescribers to Beneficiaries with Chronic Opioid Use



Project 1: Opioid Prescribing Social Network, CountyCare

Schematic of Primary Findings

Higher Risk of High Dose Prescriptions:

- Anesthesia/Pain
- Psychiatry/Sports Medicine

Lower Risk of High Dose Prescriptions:

- Emergency Medicine
- Pediatrics

Risk of High Dose Prescription

HIGH

REF

LOW

Risk of Discoordinated Prescription

LOW

REF

HIGH

Higher Risk of Discoordinated Prescriptions:

- Dental
- Emergency Medicine
- Surgical Specialties

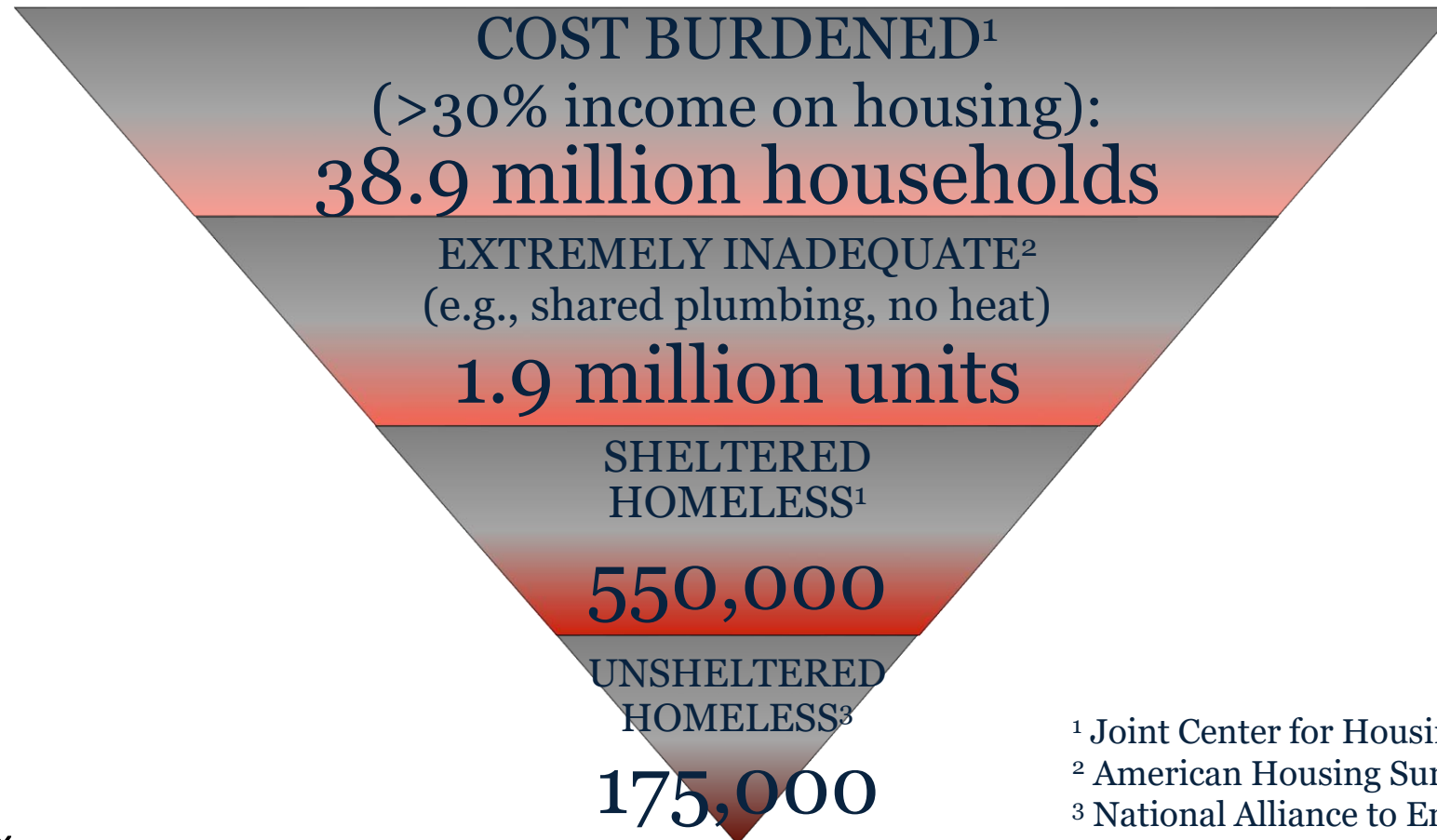
Project 1: Opioid Prescribing Social Network, CountyCare

Implications and Response

- Highly interconnected prescribers in the network's core were clinicians of **CCH's chronic pain management center**. Their model of chronic pain management may be part of a national solution.
- Prescribers in the network's periphery and specialties like emergency medicine and procedural specialties were vulnerable to exposing patients to high daily dose opioids through discoordinated prescriptions.
- **Cook County Department of Public Health** targeted public health detailing toward prescribers among procedural specialists.
- Illinois legislation (SB 1607) mandating prescribers to use the Prescription Monitoring Program for first time opioid prescriptions to each patients went into effect January 2018. Evaluation of its impact on CountyCare members planned.

Project 2: Health-Housing Data Linkages for Coordinated Entry

Background: Housing Insecurity in the United States



¹ Joint Center for Housing Studies (2017)

² American Housing Survey, USDUHD (2013)

³ National Alliance to End Homelessness (2017)

Project 2: Health-Housing Data Linkages for Coordinated Entry

CCH Opportunities and Commitments

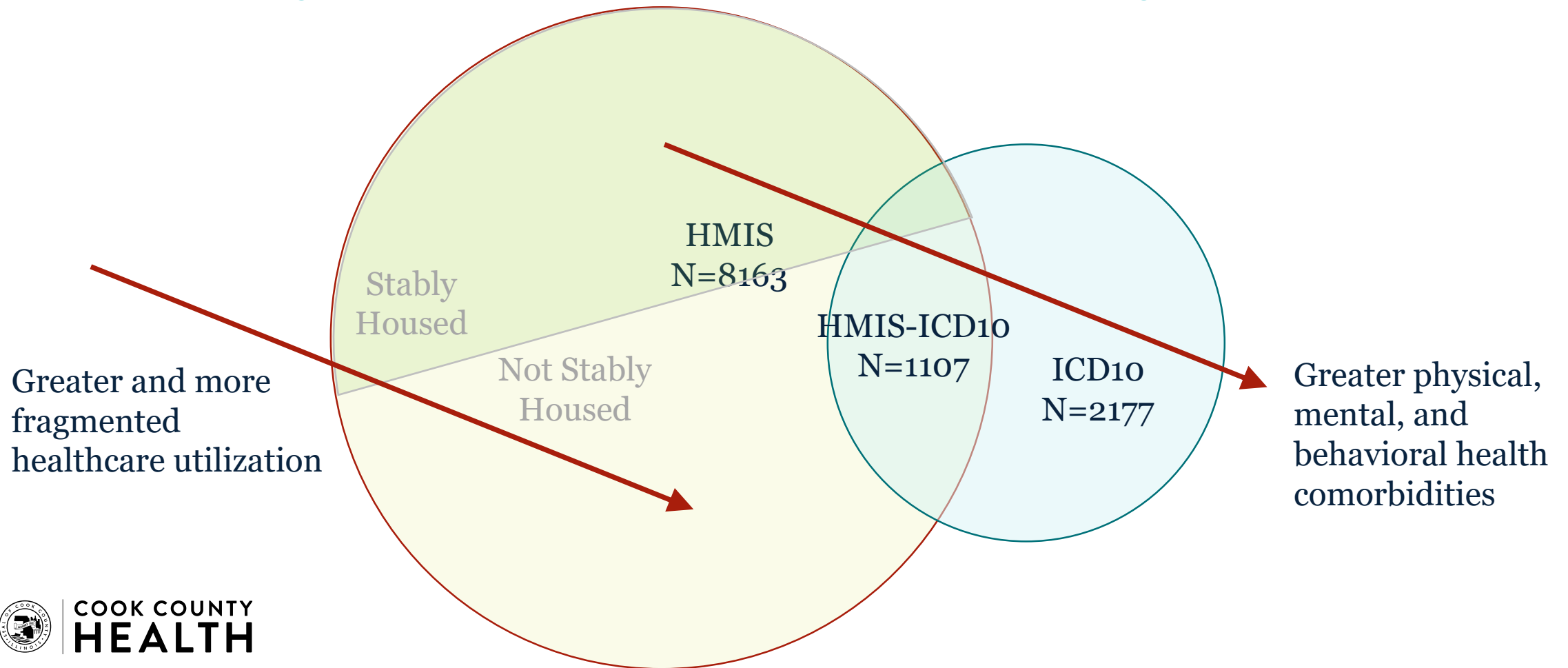
Chicago Flexible Housing Subsidy Pool Program

1. to create more effective ways to connect individuals who have been homeless with high behavioral health and physical health needs
2. to create new supportive housing



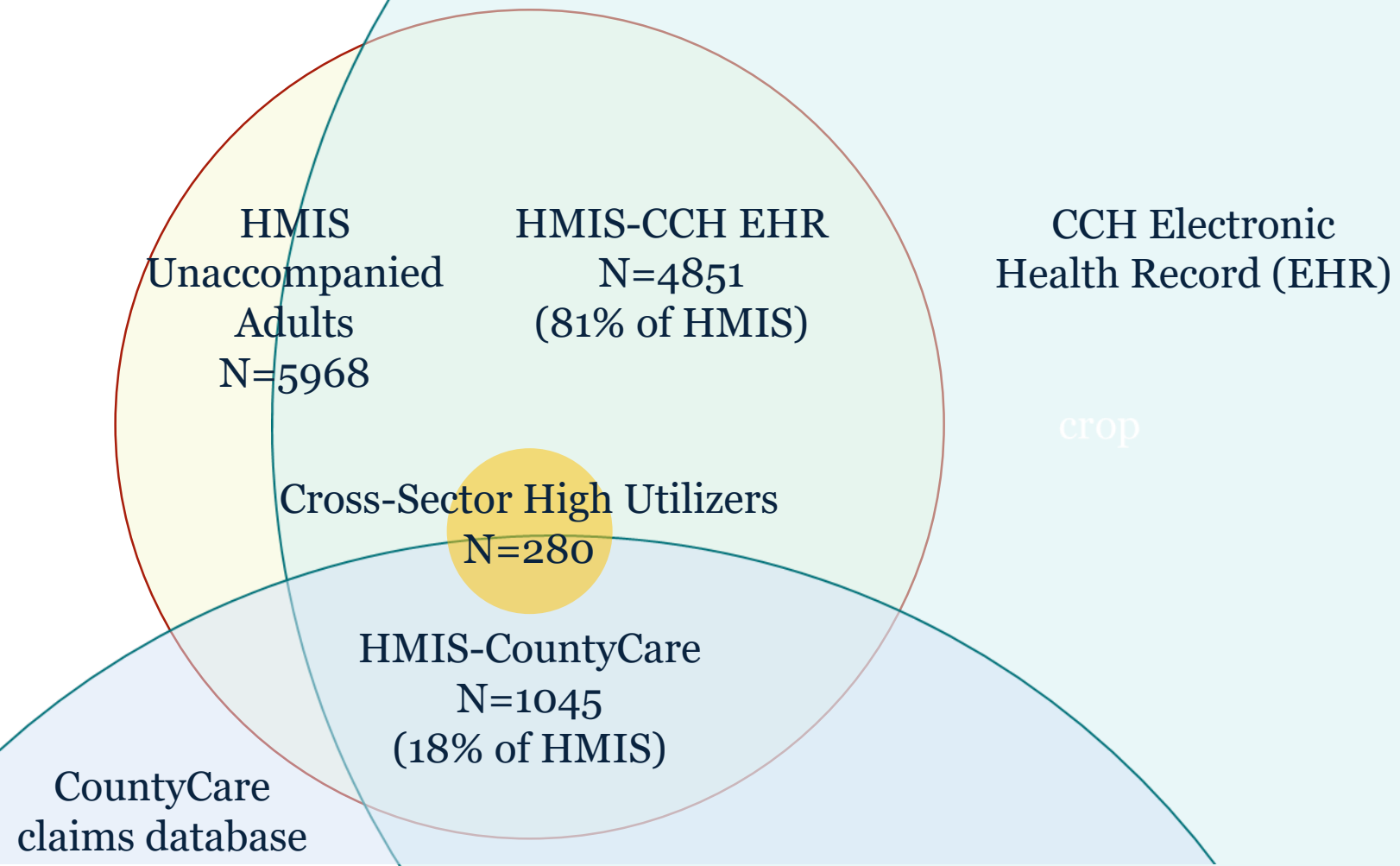
Project 2: Health-Housing Data Linkages for Coordinated Entry

Chicago Area Patient Centered Research Network (CAPriCORN)- Homeless Management Information System (HMIS) Data Linkage Study



Project 2: Health-Housing Data Linkages for Coordinated Entry

CCH-HMIS Data Linkage for the Flexible Housing Pool Project



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Project 2: Health-Housing Data Linkages for Coordinated Entry

CRU Ongoing Role in CCH Initiatives Around Housing Insecurity

- In support and coordination with **executive leadership** and external partners to make contact with patients prioritized for permanent supportive housing through the FHP.
- Lead and execute outcomes evaluation of CCH patients in the FHP.
- Synthesize experience from CCH's recent participation in other housing programs into generalizable knowledge (WIN II, Illinois Housing Development Authority rental subsidy program).
- Participate in discussions about new CCH initiatives related to housing and involve **Integrated Care Management, Departments of Emergency Medicine and Psychiatry**, and others.



SWOT Analysis

Strengths, Weaknesses, Opportunities and Threats



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SWOT Analysis

Strengths

- Expertise, experience, and track record of success with deliverables
- Goals aligned with CCH priorities in social determinants of health
- Fosters a collaborative learning environment among key stakeholders in CCH
- Strong partnerships with city & state depts. of public health, including CDC
- High staff morale

Opportunities

- Emerging partnerships in the housing and justice sectors
- Enhanced external research funding through Programmatic Services and Innovation Office

Weaknesses

- Small reserve bandwidth to support ad hoc demands on CRU resources
- Internal grants support still in development

Threats

- Commodification of research
- Increasing competitiveness in social determinants domains



FY2020-2022



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Leverage Valuable Assets

FY2020-2022 Strategic Planning Recommendations

Items

- **Apply expertise to compete for grants and serve our population**
 - Building customized applications that enhance services and provide accessible, high-value datasets
 - Share record linkage tools to facilitate exchange of clinical and public-health data
 - Continue to explore “light-touch” interventions through text-messaging
- **Continue to focus on domains critical for the health of our population**
 - Behavioral health conditions
 - Opioid use disorders
 - Justice-involved population
 - Homelessness

Thank you.



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